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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/712,176

11/13/2003

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7881

7590

03/10/2006

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EXAMINER

RIELLEY, ELIZABETH A

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/712,176

Applicant(s)

COK ET AL.

Examiner

Elizabeth A. Rielley

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Amendment filed 12/23/05 has been entered and considered by the Examiner. Currently, claims 1-23 are pending in the instant application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7-9, 11-15, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by D'Amato (US 6440277).

In regard to claim 1, D'Amato ('277) teaches a method of applying patterned materials comprising: a) providing a flexible continuous substrate (not numbered; figures 10 and 13; column 5 lines 14-27) b) providing one or more application stations (figure 10; 63, 64; column 11 line 27 to column 12 line 18), each application station having: i) one or more stationary sources of material (see figure 10; column 11 line 27 to column 12 line 18), ii) a supply of discrete patterned masks for defining a pattern of material to be applied to the substrate (68; figures 10 and 5a-5e; column 10 lines 4-43) iii) a means for attaching the discrete patterned masks to the substrate (figure 5a; column 10 lines 4-25); iv) means for transporting the substrate and the patterned mask in registration past the one or more stationary sources of

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material (not numbered see figures 10 and 13), and v) means for delivering the mask to the transporting means (not numbered, see figure 10 and 5a-5e); and c) transporting the substrate and the masks past the one or more application stations (see figure 10). The recitation that the method recited is made to produce a flat panel light source has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951).

In regard to claim 2, D'Amato ('277) teaches the stationary source (54 figure 10) is a linear source arranged orthogonal to the direction of transport (see figure 10).

In regard to claim 3, D'Amato ('277) teaches the stationary sources (54 figure 10) are arranged in parallel with respect to the direction of transport (see figure 10).

In regard to claim 4, D'Amato ('277) teaches the application stations are arranged in parallel with respect to the direction of transport (54, 55; see figure 10).

In regard to claim 7, D'Amato ('277) teaches the mask is a rigid sheet (made rigid by the transporting means, see figure 10).

In regard to claim 8, D'Amato ('277) teaches the mask is a flexible sheet (column 10 lines 4-43).

In regard to claim 9, D'Amato ('277) teaches the steps of cleaning material from the masks and reusing the masks (column 7 lines 26-33).

In regard to claim 11, D'Amato ('277) teaches the masks are discarded after a single use (column 7 lines 38-40; column 5 lines 14-32)

In regard to claim 12, D'Amato ('277) teaches the substrate is a web mounted on a supply roller located on one side of the application station (figure 10; column 5 lines 14-27).

In regard to claim 13, D'Amato ('277) teaches the step of cutting the substrate into sheets after deposition of the material (column 5 lines 14-27).

In regard to claim 14, D'Amato ('277) teaches the stationary sources are arranged in parallel with respect to the direction of transport (54, 55; figure 10).

In regard to claim 15, D'Amato ('277) teaches the step of shifting the mask relative to the substrate in a direction perpendicular to the direction of transport between sources (see figure 10; when the mask belt rolls over the transporting means, it is moving in a direction perpendicular to the direction of transport between sources).

In regard to claim 23, D'Amato ('277) teaches the step of displacing the mask in a direction orthogonal to the direction of transport of the substrate between application stations (see figure 10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Amato (US 6440277) in view of Codama (US 6091196).

D'Amato ('277) teaches all the limitations set forth, as described above, except an OLED flat panel light source is made from the method given, and the materials are light emissive materials, semiconductor materials, conductors, or dielectrics. Codama ('196) teaches a method of manufacturing a flat panel light source, which is an OLED (column 1 lines 20-25), by using deposition method that includes the use of masks (8; figures 2a-2f; column 4 line 32 to column 6 line 18; column 7 lines 40-61) to manufacture light emissive materials, semiconductor materials, conductors, or dielectrics onto a substrate (5) in order to more easily manufacture the device (column 1 lines 20-35). Hence, it would have been obvious at the time of the invention to one of ordinary skill in the art to modify the method of manufacturing patterned materials as taught by D'Amato with the deposition method as taught by Codama. Motivation to combine would be to more easily manufacture the device.

Claims 16 -22 are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Amato (US 6440277) in view of Baude et al (US 20030150384).

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In regard to claims 16, 17, 18, and 19, D'Amato ('277) discloses all the limitations set forth as described above, except the mask is made of a magnetic material; a reference surface for locating the substrate with respect to the source of material; the means for attaching the mask to the substrate is a magnet located on an opposite side of the substrate from the mask; the magnet is a fixed magnet; and the magnet is conveyed along with the substrate. Baude et al ('384) teach the mask is made of a magnetic material (10L; figure 8; paragraphs 38 and 39); a reference surface for locating the substrate with respect to the source of material (90; figure 9a; paragraphs 42 and 43); the means for attaching the mask (10L) to the substrate (52) is a magnet located on an opposite side of the substrate from the mask (82; see figure 8); the magnet is a fixed magnet (paragraphs 38 and 39); and the magnet is conveyed along with the substrate (paragraphs 38 and 39) in order to reduce costs and improve performance (paragraph 6). Hence, it would have been obvious at the invention to one of ordinary skill in the art to combine the method of manufacturing patterned materials as taught by D'Amato with the mask of Baude. Motivation to combine would be to reduce costs and improve performance.

In regard to claims 20-22, D'Amato ('277) discloses all the limitations set forth as described above, except the means for attaching the mask to the substrate is a mechanical clamp that includes means for maintaining the substrate in a planar configuration; the clamp includes a rectangular frame having clamps on two opposing edges. Baude et al ('384) teaches the means for attaching the mask to the substrate is a mechanical clamp (figures 9a and 9b; paragraphs 42-43) that includes means for maintaining the substrate in a planar configuration (see figure 9a); the clamp includes a rectangular frame having clamps on two opposing edges (see figure 9a) in order to reduce costs and improve performance (paragraph 6). Hence, it would have been obvious at the invention to one of ordinary skill in the art to combine the method of manufacturing patterned materials as taught by D'Amato with the mask of Baude. Motivation to combine would be to reduce costs and improve performance.

Response to Arguments

Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

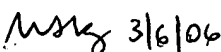
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Rielley whose telephone number is 571-272-2117. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Elizabeth Rielley

Examiner
Art Unit 2879


MARICELI SANTIAGO
PRIMARY EXAMINER